



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

AS

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/822,651	03/30/2001	Scott J. Tuman	54407USA6B.006	9447

7590

05/20/2002

Office of Intellectual Property Counsel
3M Innovative Properties Company
PO Box 33427
St. Paul, MN 55133-3427

EXAMINER

TSOY, ELENA

ART UNIT	PAPER NUMBER
----------	--------------

1762

6

DATE MAILED: 05/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/822,651

Applicant(s)

SEIDEL ET AL.

Examiner

Elena Tsoy

Art Unit

1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Response to Amendment

1. Amendment filed on March 20, 2002 has been entered.

Claim Objections

2. Claims 31-37, 41, 42, and 53-55 are objected to because of the following informalities:

Claims 31-33, 41, 42, 53-55, "the plurality of stems are oriented" should be changed to -- the plurality of stems is oriented --.

Claim 32, line 3, "the plurality of stems are angled" should be changed to -- the plurality of stems is angled --.

Claim 34-36, "the plurality of discrete regions cover" should be changed to -- the plurality of discrete regions covers --.

Claim 37, lines 1-2, "the plurality of discrete regions are separated" should be changed to - the plurality of discrete regions is separated --.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Art Unit: 1762

4. **Claims 21-23, 29, 30, 48, 49, 51, 52** are rejected under 35 U.S.C. 102(b) as being anticipated by Reich et al (US 5,456,660).

Reich et al disclose a web construction comprising a web 26; a plurality of discrete polymeric regions 32, 36 secured to a first major side of the web 26; and a plurality of hooks (stems) extending from each of said discrete polymeric regions 32, 36 (See Figs. 5, 6; column 5, lines 18-23).

Since there is no definition of a term "fuse" in the specification, the term has been given by the Examiner the broadest reasonable interpretation. According to Merriam-Webster's Dictionary the term includes among others "to stitch by applying heat and pressure with or without the use of an adhesive". Therefore, the secured polymeric regions 32, 36 in Reich et al can be interpreted as being **fused** to the first major side of the web 26 since it is conventional in the art to attach hook patches by ultrasonic welding, thermal fusing, an adhesive bond, or stitches.

As to claims 22, 49, the web comprises loop structures adapted to lock with the plurality of stems (See Figs. 5, 6; column 3, lines 32-33).

As to claim 23, the web is elastic (See column 4, lines 36, 62).

As to claims 29, 51, the plurality of discrete polymeric regions comprises a plurality of stripes 36 (See Figs. 5, 6; column 5, line 23).

As to claims 30, 52, the plurality of discrete polymeric regions comprises a plurality of patches 32, 36 (See Figs. 5, 6; column 5, lines 18-23).

As to claim 48, the web is elastic (See column 4, lines 36, 62) and comprises loop structures (See Figs. 5, 6; column 3, lines 32-33).

5. **Claims 21, 22, 24-29, 31, 33, 34, 38, 39** are rejected under 35 U.S.C. 102(e) as being anticipated by Shepard et al (US 6,205,623).

Art Unit: 1762

Shepard et al disclose a web construction comprising a web; a plurality of discrete polymeric regions fused to a first major side of the web; and a plurality of hooks (stems) extending from each of said discrete polymeric regions (See column 1, lines 59-61; column 3, lines 58-67; column 4, lines 1-5; column 10, lines 45-54).

As to claim 22, the web comprises loop structures adapted to lock with the plurality of stems (See column 3, lines 58-67; column 4, lines 1-5).

As to claim 24, the web comprises fibrous material (See column 1, lines 54-57).

As to claim 25, the web comprises a web of entangled fibers (porous web) (See column 2, lines 61-64).

As to claim 26, the web comprises woven web material (See column 7, lines 31-33).

As to claim 27, the web comprises nonwoven web material (See column 2, lines 2-4).

As to claim 28, the web comprises knit web material (See column 7, lines 31-33).

As to claim 29, the plurality of discrete polymeric regions comprises a plurality of stripes (See column 4, lines 4-5).

As to claim 31, the plurality of stems is oriented at an angle that is not normal to the web plane (See Figs. 4a-b, 12).

As to claim 33, the plurality of stems is oriented in the same direction at an angle that is not normal to the web plane (See Figs. 4a-b, 12).

As to claim 34, the plurality of discrete regions covers between 1 and 99 % of the first side of the web (See column 4, lines 4-5).

As to claim 38, the plurality of stems comprises a mushroom head (See column 2, lines 22-24; column 6, lines 46-47).

Art Unit: 1762

As to claim 39, the plurality of stems comprises hook (See column 2, lines 22-24; column 6, lines 46-47).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 23, 40, 42-53, 55** are rejected under 35 U.S.C. 103(a) as being unpatentable over Shepard et al (US 6,205,623), as applied above, further in view of Guay (US 4,714,096).

Shepard et al further teach that the web of loop material is permanently stretched and stabilized so that to use it as a wrap tie (See column 7, lines 22-27, 34-38). The hook and loop materials preferable differ in their heat properties: the hook material should melt at a lower temperature to allow the thermal fusing of hook resin around the fiber of the loop material (See column 10, lines 44-54).

As to claims 23, 40, 48, Shepard et al fail to teach that the web of loop material comprises an elastic web.

Guay teaches that a loop material for the use in skin-contacting applications, which is soft and non-irritating to the wearer's skin (See column 2, lines 39-43) can be made from elastic fabric wherein the loops are provided and maintained throughout the range of elastic elongation (See column 1, lines 9-12; column 2, lines 35-38).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have substituted a loop material in hook and loop fasteners of Shepard et al with an elastic

Art Unit: 1762

loop fabric of Guay in order to use in applications where elastic loop material can be worn directly against the skin with the expectation of providing the fasteners with the desired soft and non-irritating to the wearer's skin, as taught by Guay.

As to claim 42, Shepard et al further teach that the plurality of stems is oriented in the same direction at an angle that is not normal to the web plane (See Figs. 4a-b, 12).

As to claims 43, 51, Shepard et al further teach that the plurality of discrete polymeric regions comprises a plurality of stripes (See column 4, lines 4-5).

As to claims 44, 52, Shepard et al fail to teach that the plurality of discrete regions comprises a plurality of patches on the first major side of the web.

It would have been an obvious matter of design choice to make discrete regions of any desirable size and pattern including claimed patch pattern, depending on the particular application of end product, since such a modification would have involved a mere change in the size. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

As to claims 45, 49, Shepard et al further teach that the web comprises loop structures adapted to lock with the plurality of stems (See column 3, lines 58-67; column 4, lines 1-5).

As to claims 46, 50, Shepard et al further teach that the web comprises fibrous material (See column 1, lines 54-57).

As to claim 47, Shepard et al further teach that the web comprises a web of entangled fibers (porous web) (See column 2, lines 61-64).

As to claim 53, Shepard et al further teach that the plurality of stems is oriented at an angle that is not normal to the web plane (See Figs. 4a-b, 12).

As to claim 55, Shepard et al further teach that the plurality of stems is oriented in the same direction at an angle that is not normal to the web plane (See Figs. 4a-b, 12).

8. **Claims 30, 35-37** are rejected under 35 U.S.C. 103(a) as being unpatentable over Shepard et al (US 6,205,623).

Shepard et al fail to teach that the plurality of discrete regions comprises a plurality of patches on the first major side of the web (Claim 30); the plurality of discrete regions covers between 20 and 80 % of the first side of the web (Claim 35), or between 5 and 25 % of the first side of the web (Claim 36), or is separated from one another by an average of approximately 0.05 and 30 centimeters (Claim 37).

It would have been an obvious matter of design choice to make discrete regions of any desirable size and pattern including claimed patch pattern or claimed coverage of the web of 5-25% or 20-80 % or claimed separation of the discrete regions by an average of approximately 0.05 and 30 cm from one another, depending on the particular application of end product, since such a modification would have involved a mere change in the size. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

9. **Claims 31-33, 40-42, 44** are rejected under 35 U.S.C. 103(a) as being unpatentable over Reich et al (US 5,456,660), as applied above, further in view of Murasaki (US 5,643,651).

Reich et al fail to teach that the plurality of stems is oriented at an angle that is not normal to the plane of the web (Claims 31, 40), and further in multiple directions (Claims 32, 41), or in the same direction (Claims 33, 42).

Murasaki teaches that a plurality of stems oriented at an angle that is not normal to the plane of the web in multiple directions provides a fastener with no directivity in engaging strength

Art Unit: 1762

(See column 7, lines 53-56). In other words, stems angled in the same direction would provide engaging strength in one direction.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have made hook material in a fastener of Reich et al so that the stems are oriented at an angle that is not normal to the plane of the web and are angled in multiple directions or in the same direction with the expectation of providing the fastener with no directivity in engaging strength or providing engaging strength in one direction depending on particular use of a final product, as taught by Murasaki.

As to claim 44, Reich et al further teach that the web 26 comprises a plurality of patches 32, 36 on the first major side of the web 26 (See Figs. 5, 6).

10. **Claim 32** is rejected under 35 U.S.C. 103(a) as being unpatentable over Shepard et al (US 6,205,623), as applied above, further in view of Murasaki (US 5,643,651).

Shepard et al fail to teach that the plurality of stems is angled in multiple directions.

Murasaki teaches that a plurality of stems angled in multiple directions provides a fastener with no directivity in engaging strength (See column 7, lines 53-56).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have made hook material in a fastener of Shepard et al to have stems angled in multiple directions with the expectation of providing the desired fastener with no directivity in engaging strength, as taught by Murasaki.

11. **Claims 41, 54** are rejected under 35 U.S.C. 103(a) as being unpatentable over Shepard et al (US 6,205,623) in view of Guay (US 4,714,096), as applied above, further in view of Murasaki (US 5,643,651).

Combintaion of Shepard et al and Guay, as applied above, fails to teach that the plurality of stems is angled in multiple directions.

Murasaki teaches that a plurality of stems angled in multiple directions provides a fastener with no directivity in engaging strength (See column 7, lines 53-56).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have made hook material in a fastener of combintaion of Shepard et al and Guay to have stems angled in multiple directions with the expectation of providing the desired fastener with no directivity in engaging strength, as taught by Murasaki.

Response to Arguments

12. Applicant's arguments with respect to claims 21-55 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Art Unit: 1762

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elena Tsoy whose telephone number is (703) 605-1171. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck can be reached on (703) 308-2333. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

ET

Elena Tsoy
Examiner
Art Unit 1762

May 15, 2002


MICHAEL BARR
PRIMARY EXAMINER